

WEST Search History

DATE: Thursday, July 17, 2003

<u>Set Name</u> side by side	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u> result set
<i>DB=PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ</i>			
L11	single minded homology	0	L11
L10	L9 and l8	4	L10
L9	antisense or anti-sense	19806	L9
L8	sim2	52	L8
<i>DB=USPT; PLUR=YES; OP=ADJ</i>			
L7	single minded homolog	0	L7
L6	sim-2	0	L6
L5	l1 and l3	0	L5
L4	l1 and l2	3	L4
L3	ribozyme	5245	L3
L2	antisense or anti-sense	19468	L2
L1	sim2	41	L1

END OF SEARCH HISTORY

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LOGINID:SSSPTA1805SXM

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * Welcome to STN International * * * * *

NEWS 1	Web Page URLs for STN Seminar Schedule - N. America
NEWS 2	"Ask CAS" for self-help around the clock
NEWS 3 Feb 24	PCTGEN now available on STN
NEWS 4 Feb 24	TEMA now available on STN
NEWS 5 Feb 26	NTIS now allows simultaneous left and right truncation
NEWS 6 Feb 26	PCTFULL now contains images
NEWS 7 Mar 04	SDI PACKAGE for monthly delivery of multifile SDI results
NEWS 8 Mar 24	PATDPAFULL now available on STN
NEWS 9 Mar 24	Additional information for trade-named substances without structures available in REGISTRY
NEWS 10 Apr 11	Display formats in DGENE enhanced
NEWS 11 Apr 14	MEDLINE Reload
NEWS 12 Apr 17	Polymer searching in REGISTRY enhanced
NEWS 13 Jun 13	Indexing from 1947 to 1956 added to records in CA/CAPLUS
NEWS 14 Apr 21	New current-awareness alert (SDI) frequency in WPIDS/WPINDEX/WPIX
NEWS 15 Apr 28	RDISCLOSURE now available on STN
NEWS 16 May 05	Pharmacokinetic information and systematic chemical names added to PHAR
NEWS 17 May 15	MEDLINE file segment of TOXCENTER reloaded
NEWS 18 May 15	Supporter information for ENCOMPAT and ENCOMPLIT updated
NEWS 19 May 19	Simultaneous left and right truncation added to WSCA
NEWS 20 May 19	RAPRA enhanced with new search field, simultaneous left and right truncation
NEWS 21 Jun 06	Simultaneous left and right truncation added to CBNB
NEWS 22 Jun 06	PASCAL enhanced with additional data
NEWS 23 Jun 20	2003 edition of the FSTA Thesaurus is now available
NEWS 24 Jun 25	HSDB has been reloaded
NEWS 25 Jul 16	Data from 1960-1976 added to RDISCLOSURE
NEWS EXPRESS	April 4 CURRENT WINDOWS VERSION IS V6.01a, CURRENT MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP), AND CURRENT DISCOVER FILE IS DATED 01 APRIL 2003
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 13:16:00 ON 17 JUL 2003

=> file medline caplus biotechno biosis scisearch
COST IN U.S. DOLLARS

SINCE FILE	TOTAL
ENTRY	SESSION
0.21	0.21

FULL ESTIMATED COST

FILE 'MEDLINE' ENTERED AT 13:16:26 ON 17 JUL 2003

FILE 'CAPLUS' ENTERED AT 13:16:26 ON 17 JUL 2003
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FILE 'BIOTECHNO' ENTERED AT 13:16:26 ON 17 JUL 2003
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FILE 'BIOSIS' ENTERED AT 13:16:26 ON 17 JUL 2003
COPYRIGHT (C) 2003 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'SCISEARCH' ENTERED AT 13:16:26 ON 17 JUL 2003
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=> s sim2

L1 163 SIM2

=> s sim-2

L2 2495 SIM-2

=> s single minded homology

L3 1 SINGLE MINDED HOMOLOGY

=> s single-minded-homology

L4 1 SINGLE-MINDED-HOMOLOGY

=> s singleminded-homology

L5 0 SINGLEMINDED-HOMOLOGY

=> s antisense or anti-sense

L6 108810 ANTISENSE OR ANTI-SENSE

=> s ribozyme

L7 15824 RIBOZYME

=> s l1 and l6

L8 11 L1 AND L6

=> s l2 and l6

L9 23 L2 AND L6

=> s l1 and l7

L10 0 L1 AND L7

=> s l2 and l7

L11 4 L2 AND L7

=> dup rem l8

PROCESSING COMPLETED FOR L8

L12 5 DUP REM L8 (6 DUPLICATES REMOVED)

=> dup rem l9

PROCESSING COMPLETED FOR L9

L13 23 DUP REM L9 (0 DUPLICATES REMOVED)

```
=> dup rem l12
PROCESSING COMPLETED FOR L12
L14          5 DUP REM L12 (0 DUPLICATES REMOVED)

=> l13 not l12
L13 IS NOT A RECOGNIZED COMMAND
The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).
```

```
=> s l13 not l12
    3 FILES SEARCHED...
L15          22 L13 NOT L12
```

```
=> d 1-5 l12 ab
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L12 ANSWER 1 OF 5      MEDLINE                      DUPLICATE 1
AB  We report here a cancer drug therapy use of a gene involved in Down's
    syndrome. Using bioinformatics approaches, we recently predicted Single
    Minded 2 gene (SIM2) from Down's syndrome critical region to be
    specific to certain solid tumors. Involvement of SIM2 in solid
    tumors has not previously been reported. Intrigued by a possible
    association between a Down's syndrome gene and solid tumors, we monitored
SIM2 expression in solid tumors. Isoform-specific expression of
SIM2 short-form (SIM2-s) was seen selectively in colon,
    prostate, and pancreatic carcinomas but not in breast, lung, or ovarian
    carcinomas nor in most normal tissues. In colon tumors, SIM2-s
    expression was seen in early stages. Antisense inhibition of
SIM2-s expression in a colon cancer cell line caused inhibition of
    gene expression, growth inhibition, and apoptosis. The administration of
    the antisense, but not the control, oligonucleotides caused a
    pronounced inhibition of tumor growth in nude mice with no major toxicity.
    Our findings provide a strong rationale for the genes-to-drugs paradigm,
    establish SIM2-s as a molecular target for cancer therapeutics,
    and may further understanding of the cancer risk of Down's syndrome
    patients.
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L12 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS
AB  Disclosed are methods for diagnosing, monitoring the progression of, and
    treating a prostate disorder based upon genes that are differentially
    expressed in prostate disorders. Also disclosed are methods for
    identifying agents useful in the treatment of a prostate disorder, methods
    for monitoring the efficacy of a treatment for a prostate disorder,
    methods for inhibiting the proliferation of a prostate cell, and
    prostate-specific vectors including the promoter of these genes. A
    dendrogram of 55 exptl. samples that are grouped according to overall
    similarity in level of expression of a subset of 3,530 genes that have
    varied most across the samples is provided. Expression levels of highly
    ranked genes in normal and malignant prostate tissues are provided.
    Furthermore, the top 25 or 50 genes (with ref. GenBank accession nos.)
    overexpressed in prostate malignant tissues or cell lines are identified
    as the diagnostic markers and therapeutic targets for prostate related
    disorders. They include genes for hepsin, prostate differentiation
    factor, alpha-methylacyl-CoA racemase, fatty acid synthase, and prostate
    specific antigen (alternative splice form 2 and 3). Specifically, the
    amplification of two marker genes (hepsin and PLAB) are detected at the
    mRNA level from selected prostate tissues.
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L12 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS
AB  The invention relates to the discovery of specific polynucleotide
    sequences that are expressed at higher levels in select cancer cells than
    in non-diseased cells. The polynucleotide sequences were identified using
    a modified data mining tool referred to herein as DDDM (for Digital
    Differential Display tool, Modified) to analyze the Cancer Gene Anatomy
    Project (CGAP) database of the National Cancer Institute. In particular,
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DDDM was used to identify several expressed sequence tags (EST5) more prevalent in cancer tissue libraries than in corresponding non-cancerous tissue libraries. The identified ESTs were then used to identify specific UniGenes assocd. with cancer. Based on the identified polynucleotide sequences, a gene termed **SIM2** (for Single Minded homolog 2), whose expression is selectively upregulated in colon, prostate and pancreas tumors was identified. Disclosed are methods of detecting cancer in a biol. sample by detecting **SIM2** nucleic acid or protein in the sample. Also disclosed are methods for treating cancer and identifying compds. that modulate **SIM2** expression.

L12 ANSWER 4 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AB Several mouse homologs of Drosophila genes encoding PAS-domain transcription factors (TFs) have been identified, which contain a basic helix-loop-helix domain and a domain termed PAS (on the basis of its original identification in the Per, ARNT, and Sim proteins). PAS-domain TFs are known to play important roles in Drosophila embryogenesis and in mammalian responses to hypoxia. AIM: We hypothesized that PAS-domain TFs play a role in mammalian lung development. METHODS: We used semi-quantitative RT-PCR to analyze the ontogeny of gene expression for several known PAS-domain TFs in developing lung. We then treated e12 lung buds and e9 whole embryo cultures with **antisense** oligodeoxynucleotides and assessed functional effects on morphogenesis, cell differentiation, and cell proliferation. RESULTS: per mRNA was present only from e15 through postnatal development (P14), arnt. was expressed at high levels throughout development, decreasing to undetectable levels after birth. SIM-1 mRNA occurs on e11, e12, e14, and P1-P2. Both Sim-2 and clone 953, a novel gene we recently cloned, are expressed during embryonic development with peak levels at e10 and e13-e14, decreasing to undetectable levels after birth. HIF-1 alpha and EPAS1 were present from e10-11 through postnatally. In e12 lung bud cultures, **antisense** for SIM 2, ARNT and 953 all decreased branching morphogenesis by apprx20% compared to sense controls. 953 **antisense** blocked the early formation of lung buds in e9 embryo cultures, whereas **antisense** to sim-2 or arnt had no such effect. CONCLUSION: Cumulatively, these observations support an important role for PAS-domain proteins in regulating lung embryogenesis.

L12 ANSWER 5 OF 5 MEDLINE DUPLICATE 2

AB The hypoxia-inducible factor (HIF-1alpha), a basic helix-loop-helix transcription factor, is known to heterodimerize with ARNT1, a nuclear translocator, to trigger the overexpression in many cells of genes involved in resistance to hypoxia. Although HIF-1alpha and ARNT1 are both expressed in brain, their cellular localization and function therein are unknown. Here, using in situ hybridization and immunocytochemistry, we show that HIF-1alpha is expressed in normoxic cerebral neurons together with not only ARNT1 but also ARNT2, a cerebral translocator homologous to ARNT1 but displaying, unlike ARNT1, a selective neuronal expression. In contrast, other potential partners of the translocators, i.e. the aryl hydrocarbon receptor (AHR) and the single-minded protein 2 (**SIM2**), are not expressed in the adult brain. We also identify two splice variants of HIF-1alpha in brain, one of which dimerizes with ARNT2 even more avidly than with ARNT1. The resulting heterodimer, in contrast with the HIF-1alpha/ARNT1 complex, does not recognize the HIF-1-binding site of the hypoxia-induced erythropoietin (Epo) gene, suggesting that it controls transcription of a distinct set of genes. We therefore propose that HIF-1alpha and ARNT2 function as preferential dimerization partners in neurons to control specific responses, some of which may not be triggered by hypoxia. In support of this proposal, in nonhypoxic PC12 cells constitutively coexpressing HIF-1alpha, ARNT1 and ARNT2, downregulation of either HIF-1alpha or ARNT2, obtained with selective **antisense** nucleotides, resulted in inhibition of [3H]thymidine incorporation.

L15 ANSWER 1 OF 22 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AN 2000:30838224 BIOTECHNO
 TI Characterization of the interaction between .alpha.CP.sub.2 and the
 3'-untranslated region of collagen .alpha.1(I) mRNA
 AU Lindquist J.N.; Kauschke S.G.; Stefanovic B.; Burchardt E.R.; Brenner
 D.A.
 CS D.A. Brenner, Department of Medicine, Dept. of Biochemistry/Biophysics,
 University of North Carolina, Chapel Hill, NC 27599-7038, United States.
 E-mail: dab@med.unc.edu
 SO Nucleic Acids Research, (01 NOV 2000), 28/21 (4306-4316), 30 reference(s)
 CODEN: NARHAD ISSN: 0305-1048
 DT Journal; Article
 CY United Kingdom
 LA English
 SL English

L15 ANSWER 2 OF 22 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AN 2000:30797012 BIOTECHNO
 TI Autocrine gastrins in colon cancer cells up-regulate cytochrome c oxidase
 Vb and down-regulate efflux of cytochrome c and activation of caspase-3
 AU Wu H.; Rao G.N.; Dai B.; Singh P.
 CS P. Singh, Dept. of Anatomy and Neurosciences, University of Texas Medical
 Branch, 301 University Blvd., Galveston, TX 77555-1043, United States.
 E-mail: posingh@utmb.edu
 SO Journal of Biological Chemistry, (20 OCT 2000), 275/42 (32491-32498), 66
 reference(s)
 CODEN: JBCHA3 ISSN: 0021-9258
 DT Journal; Article
 CY United States
 LA English
 SL English

L15 ANSWER 3 OF 22 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AN 2000:30598756 BIOTECHNO
 TI Modulation of plasma protein binding and in-vivo liver cell uptake of
 phosphorothioate oligodeoxynucleotides by cholesterol conjugation
 AU Bijsterbosch M.K.; Rump E.T.; De Vruet R.L.A.; Dorland R.; van Veghel R.;
 Tivel K.L.; Biessen E.A.L.; van Berkel T.J.C.; Manoharan M.
 CS M.K. Bijsterbosch, Division of Biopharmaceutics, Leiden/Amsterdam Ctr.
 for Drug Res., PO Box 9503, 2300 RA Leiden, Netherlands.
 E-mail: bijsterb@chem.leidenuniv.nl
 SO Nucleic Acids Research, (15 JUL 2000), 28/14 (2717-2725), 44 reference(s)
 CODEN: NARHAD ISSN: 0305-1048
 DT Journal; Article
 CY United Kingdom
 LA English
 SL English

L15 ANSWER 4 OF 22 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AN 2000:30483479 BIOTECHNO
 TI Inhibition of LNCaP prostate cancer cells by means of androgen receptor
 antisense oligonucleotides
 AU Eder I.E.; Culig Z.; Ramoner R.; Thurnher M.; Putz T.; Nessler-Menardi
 C.; Tiefenthaler M.; Bartsch G.; Klocker H.
 CS Dr. H. Klocker, Department of Urology, University of Innsbruck, Anichstr.
 35, A-6020 Innsbruck, Austria.
 E-mail: helmut.klocker@uibk.ac.at
 SO Cancer Gene Therapy, (2000), 7/7 (997-1007), 51 reference(s)
 CODEN: CGTHEG ISSN: 0929-1903
 DT Journal; Article
 CY United States
 LA English
 SL English

L15 ANSWER 5 OF 22 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AN 2000:30224250 BIOTECHNO
 TI Neuropsin regulates an early phase of Schaffer-collateral long-term
 potentiation in the murine hippocampus
 AU Komai S.; Matsuyama T.; Matsumoto K.; Kato K.; Kobayashi M.; Imamura K.;
 Yoshida S.; Ugawa S.; Shiosaka S.
 CS Dr. S. Shiosaka, Division of Structural Cell Biology, NAIST, 8916-5
 Takayama, Ikoma, Nara 630-0101, Japan.
 E-mail: sshiosak@bs.aist-nara.ac.jp
 SO European Journal of Neuroscience, (2000), 12/4 (1479-1486), 38
 reference(s)
 CODEN: EJONEI ISSN: 0953-816X
 DT Journal; Article
 CY United Kingdom
 LA English
 SL English

=> d 1-5 112

L12 ANSWER 1 OF 5 MEDLINE DUPLICATE 1
 AN 2003179469 MEDLINE
 DN 22584395 PubMed ID: 12676991
 TI Identification of Down's syndrome critical locus gene **SIM2-s** as
 a drug therapy target for solid tumors.
 AU DeYoung Maurice Phil; Tress Matthew; Narayanan Ramaswamy
 CS Center for Molecular Biology and Biotechnology and Department of Biology,
 Florida Atlantic University, 777 Glades Road, Boca Raton, FL 33431, USA.
 SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF
 AMERICA, (2003 Apr 15) 100 (8) 4760-5.
 Journal code: 7505876. ISSN: 0027-8424.
 CY United States
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200306
 ED Entered STN: 20030417
 Last Updated on STN: 20030618
 Entered Medline: 20030617

L12 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS
 AN 2002:575292 CAPLUS
 DN 137:153381
 TI Genes overexpressed in prostate disorders as diagnostic and therapeutic
 targets
 IN Hampton, Garret Malcolm; Welsh, John Barnard
 PA IRM, LLC, Bermuda
 SO PCT Int. Appl., 55 pp.
 CODEN: PIXXD2
 DT Patent
 LA English
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002059373	A2	20020801	WO 2002-US1615	20020122
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

US 2003013097 A1 20030116 US 2002-54498 20020122
 PRAI US 2001-263461P P 20010123
 US 2001-301639P P 20010628

L12 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS

AN 2002:123273 CAPLUS

DN 136:179036

TI Association of SIM2 with cancer and methods for detection and treatment of SIM2-associated cancers

IN Narayanan, Ramaswamy

PA Florida Atlantic University, USA

SO PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002012565	A1	20020214	WO 2001-US24781	20010806
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2001084751	A5	20020218	AU 2001-84751	20010806
US 2002081613	A1	20020627	US 2001-923684	20010806
EP 1307594	A1	20030507	EP 2001-963831	20010806
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI US 2000-223531P	P	20000804		
US 2000-257965P	P	20001222		
WO 2001-US24781	W	20010806		

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L12 ANSWER 4 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.

AN 2001:254553 BIOSIS

DN PREV200100254553

TI PAS-domain transcription factors as regulators of mouse lung embryogenesis.

AU Kong, Yanping (1); Subramaniam, Meera; Shan, Lin; Sunday, Mary E.

CS (1) Children's Hospital, 300 Longwood Ave., Enders 906, Boston, MA, 02115 USA

SO FASEB Journal, (March 8, 2001) Vol. 15, No. 5, pp. A762. print.

Meeting Info.: Annual Meeting of the Federation of American Societies for Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA March 31-April 04, 2001

ISSN: 0892-6638.

DT Conference

LA English

SL English

L12 ANSWER 5 OF 5 MEDLINE

DUPLICATE 2

AN 2001033358 MEDLINE

DN 20485467 PubMed ID: 11029639

TI Two splice variants of the hypoxia-inducible factor HIF-1alpha as potential dimerization partners of ARNT2 in neurons.

AU Drutel G; Kathmann M; Heron A; Gros C; Mace S; Schwartz J C; Arrang J M

CS Unite de Neurobiologie et Pharmacologie Moleculaire (U.109) INSERM; Centre Paul Broca, 2ter rue d'Alesia, 75014 Paris, France.

SO EUROPEAN JOURNAL OF NEUROSCIENCE, (2000 Oct) 12 (10) 3701-8.

Journal code: 8918110. ISSN: 0953-816X.
CY France
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200011
ED Entered STN: 20010322
Last Updated on STN: 20010322
Entered Medline: 20001130

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(FILE 'HOME' ENTERED AT 13:16:00 ON 17 JUL 2003)

FILE 'MEDLINE, CAPLUS, BIOTECHNO, BIOSIS, SCISEARCH' ENTERED AT 13:16:26
ON 17 JUL 2003

L1 163 S SIM2
L2 2495 S SIM-2
L3 1 S SINGLE MINDED HOMOLOGY
L4 1 S SINGLE-MINDED-HOMOLOGY
L5 0 S SINGLEMINDED-HOMOLOGY
L6 108810 S ANTISENSE OR ANTI-SENSE
L7 15824 S RIBOZYME
L8 11 S L1 AND L6
L9 23 S L2 AND L6
L10 0 S L1 AND L7
L11 4 S L2 AND L7
L12 5 DUP REM L8 (6 DUPLICATES REMOVED)
L13 23 DUP REM L9 (0 DUPLICATES REMOVED)
L14 5 DUP REM L12 (0 DUPLICATES REMOVED)
L15 22 S L13 NOT L12

=> d l13 1-23 ti

L13 ANSWER 1 OF 23 SCISEARCH COPYRIGHT 2003 THOMSON ISI
TI Cell death and mechanoprotection by filamin A in connective tissues after challenge by applied tensile forces

L13 ANSWER 2 OF 23 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
TI PAS-domain transcription factors as regulators of mouse lung embryogenesis.

L13 ANSWER 3 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
TI Autocrine gastrins in colon cancer cells up-regulate cytochrome c oxidase Vb and down-regulate efflux of cytochrome c and activation of caspase-3

L13 ANSWER 4 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
TI Characterization of the interaction between .alpha.CP.sub.2 and the 3'-untranslated region of collagen .alpha.1(I) mRNA

L13 ANSWER 5 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
TI Modulation of plasma protein binding and in vivo liver cell uptake of phosphorothioate oligodeoxynucleotides by cholesterol conjugation

L13 ANSWER 6 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
TI Neuropsin regulates an early phase of Schaffer-collateral long-term potentiation in the murine hippocampus

L13 ANSWER 7 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
TI Inhibition of LNCaP prostate cancer cells by means of androgen receptor **antisense** oligonucleotides

L13 ANSWER 8 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
TI Calcium sensing in cultured chondrogenic RCJ3.1C5.18 cells

- L13 ANSWER 9 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI Interleukin-1-induced nuclear factor-.kappa.B-I.kappa.B .alpha. autoregulatory feedback loop in hepatocytes. A role for protein kinase C.alpha. in post-transcriptional regulation of I.kappa.B.alpha. resynthesis.
- L13 ANSWER 10 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI D.sub.2 dopamine **antisense** RNA expression vector, unlike haloperidol, produces long-term inhibition of D.sub.2 dopamine-mediated behaviors without causing up-regulation of D.sub.2 dopamine receptors
- L13 ANSWER 11 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI Keratinocyte growth factor expression by the bovine corpus luteum
- L13 ANSWER 12 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI NG108-15 cells express neuregulin that induces AChR .alpha.-subunit synthesis in cultured myotubes
- L13 ANSWER 13 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI Molecular characterization of coding and untranslated regions of rat cortex lithium-sensitive myo-inositol monophosphatase cDNA
- L13 ANSWER 14 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI Glyceraldehyde-3-phosphate dehydrogenase **antisense** oligodeoxynucleotides protect against cytosine arabinonucleoside-induced apoptosis in cultured cerebellar neurons
- L13 ANSWER 15 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI Sense and **antisense** transcripts of the developmentally regulated murine hsp70.2 gene are expressed in distinct and only partially overlapping areas in the adult brain
- L13 ANSWER 16 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI Synthesis of thymidine dimers containing piperazine in the internucleoside linkage and their incorporation into oligodeoxynucleotides
- L13 ANSWER 17 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI Expression of SGP-1 mRNA in preimplantation mouse embryos
- L13 ANSWER 18 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI B.sub.1 and B.sub.2 bradykinin receptors encoded by distinct mRNAs
- L13 ANSWER 19 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI Expression cloning of a human renal cDNA that induces high affinity transport of L-cystine shared with dibasic amino acids in Xenopus oocytes
- L13 ANSWER 20 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI Modulation of contractile protein gene expression in fetal murine crural muscles: Emergence of muscle diversity
- L13 ANSWER 21 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI cDNA cloning of the B cell membrane protein CD22: A mediator of B-B cell interactions
- L13 ANSWER 22 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI Post-transcriptional events are responsible for low expression of myelin basic protein in myelin deficient mice: role of natural **antisense** RNA
- L13 ANSWER 23 OF 23 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 TI Discrimination of heterogenous mRNAs encoding strychnine-sensitive glycine receptors in Xenopus oocytes by **antisense** oligonucleotides

=> d 1-5 114

L14 ANSWER 1 OF 5 MEDLINE
AN 2003179469 MEDLINE
DN 22584395 PubMed ID: 12676991
TI Identification of Down's syndrome critical locus gene **SIM2**-s as
a drug therapy target for solid tumors.
AU DeYoung Maurice Phil; Tress Matthew; Narayanan Ramaswamy
CS Center for Molecular Biology and Biotechnology and Department of Biology,
Florida Atlantic University, 777 Glades Road, Boca Raton, FL 33431, USA.
SO PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF
AMERICA, (2003 Apr 15) 100 (8) 4760-5.
Journal code: 7505876. ISSN: 0027-8424.
CY United States
DT Journal; Article; (JOURNAL ARTICLE)
LA English
FS Priority Journals
EM 200306
ED Entered STN: 20030417
Last Updated on STN: 20030618
Entered Medline: 20030617

L14 ANSWER 2 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 2002:575292 CAPLUS
DN 137:153381
TI Genes overexpressed in prostate disorders as diagnostic and therapeutic
targets
IN Hampton, Garret Malcolm; Welsh, John Barnard
PA IRM, LLC, Bermuda
SO PCT Int. Appl., 55 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002059373	A2	20020801	WO 2002-US1615	20020122
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
	RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
	US 2003013097	A1	20030116	US 2002-54498	20020122
PRAI	US 2001-263461P	P	20010123		
	US 2001-301639P	P	20010628		

L14 ANSWER 3 OF 5 CAPLUS COPYRIGHT 2003 ACS
AN 2002:123273 CAPLUS
DN 136:179036
TI Association of **SIM2** with cancer and methods for detection and
treatment of **SIM2**-associated cancers
IN Narayanan, Ramaswamy
PA Florida Atlantic University, USA
SO PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002012565	A1	20020214	WO 2001-US24781	20010806
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2001084751	A5	20020218	AU 2001-84751	20010806
	US 2002081613	A1	20020627	US 2001-923684	20010806
	EP 1307594	A1	20030507	EP 2001-963831	20010806
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
PRAI	US 2000-223531P	P	20000804		
	US 2000-257965P	P	20001222		
	WO 2001-US24781	W	20010806		
RE.CNT	3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT				

L14 ANSWER 4 OF 5 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
 AN 2001:254553 BIOSIS
 DN PREV200100254553
 TI PAS-domain transcription factors as regulators of mouse lung
 embryogenesis.
 AU Kong, Yanping (1); Subramaniam, Meera; Shan, Lin; Sunday, Mary E.
 CS (1) Children's Hospital, 300 Longwood Ave., Enders 906, Boston, MA, 02115
 USA
 SO FASEB Journal, (March 8, 2001) Vol. 15, No. 5, pp. A762. print.
 Meeting Info.: Annual Meeting of the Federation of American Societies for
 Experimental Biology on Experimental Biology 2001 Orlando, Florida, USA
 March 31-April 04, 2001
 ISSN: 0892-6638.
 DT Conference
 LA English
 SL English

L14 ANSWER 5 OF 5 MEDLINE
 AN 2001033358 MEDLINE
 DN 20485467 PubMed ID: 11029639
 TI Two splice variants of the hypoxia-inducible factor HIF-1alpha as
 potential dimerization partners of ARNT2 in neurons.
 AU Drutel G; Kathmann M; Heron A; Gros C; Mace S; Schwartz J C; Arrang J M
 CS Unite de Neurobiologie et Pharmacologie Moleculaire (U.109) INSERM, Centre
 Paul Broca, 2ter rue d'Alesia, 75014 Paris, France.
 SO EUROPEAN JOURNAL OF NEUROSCIENCE, (2000 Oct) 12 (10) 3701-8.
 Journal code: 8918110. ISSN: 0953-816X.
 CY France
 DT Journal; Article; (JOURNAL ARTICLE)
 LA English
 FS Priority Journals
 EM 200011
 ED Entered STN: 20010322
 Last Updated on STN: 20010322
 Entered Medline: 20001130

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 L16 4 DUP REM L11 (0 DUPLICATES REMOVED)

=> d 1-4

L16 ANSWER 1 OF 4 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AN 2000:30694111 BIOTECHNO
 TI Folding mechanism of the Tetrahymena **ribozyme** P4-P6 domain
 AU Deras M.L.; Brenowitz M.; Ralston C.Y.; Chance M.R.; Woodson S.A.
 CS S.A. Woodson, T.C. Jenkins Dept. of Biophysics, Johns Hopkins University,
 3400 North Charles Street, Baltimore, MD 21218-2685, United States.
 E-mail: swoodson@jhu.edu
 SO Biochemistry, (12 SEP 2000), 39/36 (10975-10985), 45 reference(s)
 CODEN: BICHAW ISSN: 0006-2960
 DT Journal; Article
 CY United States
 LA English
 SL English

L16 ANSWER 2 OF 4 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AN 1999:29477389 BIOTECHNO
 TI Mn.sup.2.sup.+-nitrogen interactions in RNA probed by electron spin-echo
 envelope modulation spectroscopy: Application to the hammerhead
ribozyme
 AU Morrissey S.R.; Horton T.E.; Grant C.V.; Hoogstraten C.G.; Britt R.D.;
 DeRose V.J.
 CS V.J. DeRose, Department of Chemistry, Texas AandM University, College
 Station, TX 77842, United States.
 SO Journal of the American Chemical Society, (1999), 121/39 (9215-9218)
 CODEN: JACSAT ISSN: 0002-7863
 DT Journal; Article
 CY United States
 LA English
 SL English

L16 ANSWER 3 OF 4 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AN 1999:29363151 BIOTECHNO
 TI A hydrogen-bonding triad stabilizes the chemical transition state of a
 group I **ribozyme**
 AU Strobel S.A.; Ortoleva-Donnelly L.
 CS S.A. Strobel, Dept. of Molec. Biophysics/Biochem., Yale University, 260
 Whitney Avenue, New Haven, CT 06520-8114, United States.
 E-mail: strobel@csb.yale.edu
 SO Chemistry and Biology, (1999), 6/3 (153-165), 64 reference(s)
 CODEN: CBOLE2 ISSN: 1074-5521
 DT Journal; Article
 CY United Kingdom
 LA English
 SL English

L16 ANSWER 4 OF 4 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AN 1992:22354093 BIOTECHNO
 TI Catalytic RNA reactions of yeast tRNA(Phe) fragments
 AU Deng H.-Y.; Termini J.
 CS Department of Molecular Biochemistry, City of Hope Beckman Research
 Inst., 1450 East Duarte Road, Duarte, CA 91010, United States.
 SO Biochemistry, (1992), 31/43 (10518-10528)
 CODEN: BICHAW ISSN: 0006-2960
 DT Journal; Article
 CY United States
 LA English
 SL English

=> d ab 1-4

L16 ANSWER 1 OF 4 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AB Synchrotron X-ray-dependent hydroxyl radical footprinting was used to
 probe the folding kinetics of the P4-P6 domain of the Tetrahymena group I

ribozyme, which forms a stable, closely packed tertiary structure. The 160-nt domain folds independently at a similar rate (~ 2 s.^{sup.1}) as it does in the **ribozyme**, when folding is measured in 10 mM sodium cacodylate and 10 mM MgCl.₂. Surprisingly, tertiary interactions around a three-helix junction (P5abc) within the P4-P6 domain fold at least 25 times more rapidly ($k \geq 50$ s.^{sup.1}) in isolation, than when part of the wild-type P4-P6 RNA. This difference implies that long-range interactions in the P4-P6 domain can interfere with folding of P5abc. P4-P6 was observed to fold much faster at higher ionic strength than in 10 mM sodium cacodylate. Analytical centrifugation was used to measure the sedimentation and diffusion coefficients of the unfolded RNA. The hydrodynamic radius of the RNA decreased from 58 to 46 Å. over the range of 0-100 mM NaCl. We propose that at low ionic strength, the addition of Mg.^{sup.2}.^{sup.+} causes the domain to collapse to a compact intermediate where P5abc is trapped in a non-native structure. At high ionic strength, the RNA rapidly collapses to the native structure. Faster folding most likely results from a different average initial conformation of the RNA in higher salt conditions.

L16 ANSWER 2 OF 4 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AB We report application of electron spin-echo envelope modulation (ESEEM) spectroscopy to the problem of metal coordination environments in structured RNA molecules. ESEEM has been used in conjunction with ¹sup.5N-guanosine labeling to identify nitrogen ligation to a Mn.^{sup.2}.^{sup.+} site in a hammerhead **ribozyme** and in Mn.^{sup.2}.^{sup.+}-model guanosine monophosphate (GMP) complexes. Hammerhead **ribozyme** complexes consisting of a 34-nucleotide RNA enzyme strand annealed to a 13-nucleotide DNA substrate strand were poised in 1 M NaCl as a 1:1 complex with Mn.^{sup.2}.^{sup.+}, conditions previously determined to populate a single high-affinity Mn.^{sup.2}.^{sup.+} site (Horton, T. E.; Clardy, R. D.; DeRose, V. J. Biochemistry 1998, 37, 18094-18108). Significant modulation of the electron spin-echo from several low-frequency features is detected for the natural- abundance, ¹sup.4N-hammerhead samples. At 3600 G, the main hammerhead three-pulse ESEEM features arise at 0.6, 1.9, 2.5, and 5.2 MHz and are nearly identical for a Mn.^{sup.2}.^{sup.+}-GMP complex under the same conditions. For a **ribozyme** having ¹sup.5N-guanosine incorporated into the enzyme strand, as well as for an ¹sup.5N-labeled Mn.^{sup.2}.^{sup.+}-GMP complex, the modulation is completely altered and consists of one main feature at 3.4 MHz and a smaller feature at the $\nu(n)$ (¹sup.5N) Larmor frequency of 1.6 MHz. Preliminary analysis of the ESEEM data reveals an apparent hyperfine coupling of A(¹sup.4N) ~ 2.3 MHz, similar to previously reported values for Mn.^{sup.2}.^{sup.+} directly coordinated to histidine and imidazole. These data demonstrate the potential for ESEEM as a spectroscopic tool for metal ligand determination in structured RNA molecules.

L16 ANSWER 3 OF 4 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AB Background: The group I intron is an RNA enzyme capable of efficiently catalyzing phosphoryl-transfer reactions. Functional groups that stabilize the chemical transition state of the cleavage reaction have been identified, but they are all located within either the 5'-exon (P1) helix or the guanosine cofactor, which are the substrates of the reaction. Functional groups within the **ribozyme** active site are also expected to assist in transition-state stabilization, and their role must be explored to understand the chemical basis of group I intron catalysis. Results: Using nucleotide analog interference mapping and site-specific functional group substitution experiments, we demonstrate that the 2'-OH at A207, a highly conserved nucleotide in the **ribozyme** active site; specifically stabilizes the chemical transition state by ~ 2 kcal mol.^{sup.1}. The A207 2'-OH only makes its contribution when the U(-1) 2'-OH immediately adjacent to the scissile phosphate is present, suggesting that the 2'-OHs of A207 and U(-1) interact during the chemical step. Conclusions: These

data support a model in which the 3'-oxyanion leaving group of the transesterification reaction is stabilized by a hydrogen-bonding triad consisting of the 2'-OH groups of U(-1) and A207 and the exocyclic amine of G22. Because all three nucleotides occur within highly conserved non-canonical base pairings, this stabilization mechanism is likely to occur throughout group I introns. Although this mechanism utilizes functional groups distinctive of RNA enzymes, it is analogous to the transition states of some protein enzymes that perform similar phosphoryl-transfer reactions.

L16 ANSWER 4 OF 4 BIOTECHNO COPYRIGHT 2003 Elsevier Science B.V.
 AB We describe 12 new catalytic RNA reactions which are intermolecular variants of the well-known intramolecular Pb.sup.2.sup.+-promoted hydrolysis of yeast tRNA(Phe). Fragments derived from the native yeast tRNA(Phe) which possess the T stem-loop can function as catalysts for the site-specific hydrolysis at p18 of D stem-loop-containing fragments. An initial report described the catalytic cleavage of an unmodified T7 transcript corresponding to the 5' half of tRNA(Phe) by a 3' half-molecule derived from the native tRNA. .cents.Sampson, J. R., Sullivan, F. X., Behlen, L. S., DiRenzo, A. B., and Uhlenbeck, O. C. (1987) Cold Spring Harbor Symp. Quant. Biol. 52, 267-275!. We have investigated the trans reaction further by creating a family of substrate and catalyst RNA molecules by dissection of the native tRNA(Phe) using a combination of chemical and enzymatic methods. A search for cleavage activity in trans was conducted using a combinatorial approach with the available T and D stem-loop-containing fragments. Twelve combinations were found to be catalytic, and initial rates, k(cat)'s, and K(m)'s are reported for each. The k(cat)'s for the reactions differ by .sim.20-fold, whereas K(m)'s vary by only .sim.2-fold. Differences in some of the cleavage rates argue that tertiary interactions present in the intact molecule can be reconstituted in the fragment combinations. Secondary structural features remote from the cleavage site can also affect the apparent cleavage rates. A minimum catalytic complex consisting of a substrate fragment corresponding to nucleotides 1-24 of the native molecule and a catalytic RNA corresponding to 46-76 is identified. This complex is of interest since the transition state for cleavage involves only three helices, with no elements of the anticodon required for cleavage. This is reminiscent of the proposed secondary structure of the hammerhead catalytic RNA cleavage motif.

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